

A STUDY ON THE RELATIONSHIP BETWEEN CROWDSOURCING AN INNOVATIVE APPROACH FOR ENHANCING INDUSTRY PERFORMANCE AND PRODUCTIVITY IN MEDIUM SECTOR INDUSTRY

ROHITH SRIPATHI BHAT¹ & RETHY B. MENON²

¹M.com, Amrita School of Arts and Sciences, Amrita Vishwa Vidyapeetham, Mysore, Karnataka, India

²Assistant Professor, Department of Management and Commerce, Amrita School of Arts and Sciences,
Amrita Vishwa Vidyapeetham, Mysore, Karnataka, India

ABSTRACT

Crowdsourcing is the method in which the employees outsource a huge number of individuals to get the work obtained by them through the means of their idea generation of the product which enhances the quality of the company's goodwill. Democratic in nature is a vital component of this method. The present world is focused on Innovative concepts in the product development for the survival of the organization. Knowledge sharing of the ideas with each other should be must among the young innovators. Creating the value for the products and services in terms of quality helps in the overall growth of the organization. The study aims at finding out crowd sourcing perception by the employees. The second purpose makes to find out the performance of the industry in adopting the crowd sourcing method. The third objective of the study is to find out the relationship between crowdsourcing and performance of the industry. Crowd sourcing helps in motivating the employee to do different work away from their monotonous schedule. It helps to take strategic decisions easily and ultimately result in the attainment of business objectives. In this study, the investigator has used Likert type questionnaire to measure the perception level of the employees towards crowd sourcing. The sample size of the study is 100 employees in various IT companies which come under medium sector industry. The study uses simple random sampling techniques. The investigator makes use of the statistical analytic techniques like mean, variance analysis and correlation. The findings of the study revealed that there exists a positive relationship between the usage of crowd sourcing and industrial performance in the medium sector industry.

KEYWORDS: Crowdsourcing, Democratic Nature & Strategic Decisions

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INTRODUCTION

Being unique is the way to produce results in the current trend prevailing in today's world. Speaking in a broader sense, calibre of the product in our country has least possible share in the total revenue generation. The way the management performs in the organization and the way they get the work done by the employees makes the employees feel their work as a dry one. Another aspect is the way employees really feel about the pay-scale and the growth in their potentials as far as view of the organization is concerned. In the process of developing the established strategic management process, formulating a change in the structure of strategic decision making and the same in implementing those strategies and conveying it to the operational level make the workers work in

a creative manner in the organization. Talent is that which makes an individual to showcase their skills, the way they acquire knowledge to perform those skills, the procedures in which they make efforts productive and constructive in their work and finally concentrates to build upon the perfection level to their maximum ability, resulting in better quality outcomes in the organization shaping the GDP growth in our country. In any organization, problems in regard with any issues are likely to take birth during any stages of work the organization is performing. Various kinds of problem solving techniques such as, five step model, demming cycle and many more, in the similar fashion, make us to form a team of members to discuss, analyze and bring unique solution, thereby suggesting to the management suitable decision making for the up liftment of the organization. By considering all the above points, the concept of crowd sourcing have arrived recently in our country. Emerging firms like Innocentive, crowd-analytics and such other firms are striving to develop the young minds and building well established crowd sourcing platform in the near future in India. The term crowd sourcing involves many terminologies which lays down a strong foundation for getting clarity on this subject matter. The historical background of crowd sourcing says that the activity of the crowd sourcing started early in Italy, where its government was giving a prize for the low-graded French citizens for performing logical and creative tasks.

Need and Significance of the Study

According to Laura lake, “Crowd sourcing is using collective intelligence gathered from the public and using that information to complete business related tasks”. In crowd sourcing there are many concepts to understand and get a clarity on the whole subject. Various concepts like cloud-labour, co-creation, crowd funding, open-innovation, crowd-storming, spin-off, mirror companies, crowd-casting are included in crowd sourcing. Micro-tasking is that vital terminology which divides the huge tasks into tiny parts making the crowd-sourcer to accomplish within a shorter time frame thereby ultimately resulting in the achievement of organizational goals quicker. The marketing department has a vivid scope in the organization in connection with the term crowd sourcing. It tries to search the required skills of the customer for accomplishing the work of the organization. Crowd sourcing helps to increase the entrepreneurial growth in the developing countries which focus on extraordinary products and services by the means of restructuring strategies. The present generation is looking out for the change in each and every aspect based on their needs and preferences and this makes us to obtain ideas, perception or tasks from a huge number of individual and by utilization their ideas or tasks accomplishing the company's goal and mission. This makes the crowd a sense of contributing to the entire nation's welfare and indirectly helps them in mounting the rate of employment in our country, increasing the market share of both company and the nation. The renovation has to be built in such a format which also makes the young crowd to analyze the social benefit of the product that is further to be developed in the organization. These new ideas can be brought out from the young crowds in the form of conducting a contest. These contests are developed in by displaying various activities in the online crowd sourcing website of the organization and those who completes the activity within the stipulated time period will be awarded with the prize by the contest organizer, these contests judges the innovation, skill, the level of logic and reasoning ability, the adoption of the methods and procedures to perform the activities by the crowd. Entrepreneurs who are involved in crowd sourcing activity are termed as crowd sourcing entrepreneurs and they look artistry of the crowd in developing the product or services. These crowd sourcing entrepreneurs make their own ideas and the crowd idea to be matched accordingly. As crowd funding is part in the crowd sourcing activity, the only minute difference is the crowd sourcing is obtaining tasks or ideas from a large group of people and crowd funding is the method to procure the financial resources for the establishment of the business. As new ideas are a crucial part in the crowd sourcing activity, the organization have to appoint a person who will be termed as a strategic innovator which involves to perform such activity which makes a way

for different ways of producing the products from the competitor of their organization. As the employees in the organization are indulged in outsourcing a massive number of people, it makes the employees to be building a change in their work system performing better in the organization. Various factors in relation to crowd sourcing affects the employees performance in the organisation. Factors which influence the performance of the employees includes the level of stress, control factor, personality development, work environment, motivation which determines the success factor of the organization. Working on new ideas may bring in development in the employees' personal intellectual which further encourages to put effort further in for next ideas they are going to generate. This concept makes to transform the structure of employees attitude towards the work from orthodox to a broad minded one for attaining the success factor and to win the competition prevailing among other international organizations. Unorthodox framework to be adopted by the workforce in the organization makes a way to acquire the hidden talents of the general public to yield better grade products and extends the durability of the product and services, It not only acquire the hidden talents of the general people but motivates the employees to research into various new ideas and help the management to take decision effectively in accepting the project or not. Thus the investigator felt that there exists a need for the researchers to study on the new trends of using this innovative approach so that they can create wonders in the functioning of small and medium sector industries.

LITERATURE REVIEW

Watanabe and Seta (2015) conducted a study on "Crowd sourcing of idea generation and selection and new product performance". The objective of the study was to know the effect of crowd sourcing of idea generation and selection on new product performance. The collection of data were from more than 150 NPD projects. The tool used in this paper was based on consumer reviews. The contributions of the study was a 4-fold. Firstly, relating to differential impact of idea generation and selection. Secondly, openness is conceptualised as a multi-dimensional continuum. Thirdly, archival and longitudinal data were made. Ultimately, it gave suggestion in developing quality products through idea crowd sourcing.

Felstiner(2011) conducted a study, "Working in the crowd -Employment and labour law in the crowd sourcing industry". The objective of the study was to apply traditional employment and labour law to crowd sourcing. The data collected for this study from amazon mechanical turk. The tool for this study was not mentioned in the study. According to the author, the authorities have not formulated any laws to the crowd labour. The principles of the crowd sourcing harness the potentials of the crowd. Motivation of the workers were also encouraged in financial terms in the industry.

Jette, Breck and John (2010) conducted the study on "Integrating Balance scorecard performance management with crowd sourced strategic planning. The objective of the study is the application of crowd sourcing principles to the design of a strategic planning process. It also aims in employee's engagement and development and also aims in identify and sustain strategic initiative to achieve Balance scorecard outcomes. The findings revealed five crowd sourcing objectives – Energizing, listening, talking, supporting and embracing and also found that the implementation of strategy can be followed in four stages i.e; Kick-off event, feedback sessions, employee voting and management presentation which is simplified into -envisioning, identifying actions, selecting solutions and prioritizing investments. The data were collected by US based moving Volpe company (transportation company).

Yuen, King and Leung (2011) conducted the study on, " A survey of crowd sourcing systems". The objective of the study aims at usage of application systems in crowd sourcing. The tool has not been mentioned in the study. The data

have been collected by the support of research grants council of the Hong Kong special administrative region of China affiliated with Microsoft, who partially supported the study. The findings of the study revealed that voting system in amazon mechanical turk helps the crowd sourced worker to select the appropriate answer from a given set of choices or alternatives. It found that that the websites helps in sharing the information easily among the crowd. It also found that usage of creativity in the task would reduce the production cost. Cheating decisions quality management, user participation helps in facilitating application development in crowd sourcing.

Brabham (2013) conducted a study on, “Using crowd sourcing in government”. The objective of the study aims at considering the open problem solving techniques for engaging the public and to tackle difficult policy and administrative tasks by the means of online group of people. The findings of the study revealed that there are four crowd sourcing problem types in governance -1) Knowledge discovery and management 2) Distributed human intelligence tasking 3) Broadcast search 4) Peer-vetted creative production. Knowledge discovery helps the government agencies to bring out the new information into a common platform or location. Human intelligence tasking is that activity where organization gives out work to the crowd after analyzing huge amounts of information. Broadcast search is the activity where the work will be given to the crowd to solve the empirical problems. Finally, peer-vetted creative production is a unique activity where the crowd will be creating and selecting creative ideas for the better-governance. The tool has not been mentioned. The data collected for his study was from government agencies.

Realty (2017) has conducted a study on “Recent Trends in Industry in Adopting Crowd Sourcing and Problem Solving for Employees Productivity and Efficiency with Special Reference to IT Industry”. The study was conducted on the employees of IT industry and it was found out that there exists a positive correlation between crowd sourcing and Problem Solving Ability ability for enhancing the productivity level of employees.

DEFINITION OF THE VARIABLES

“Crowd sourcing involves obtaining work, information or opinions from a large group of people who submit their data via the Internet, social media and smart phone apps”. (Investopedia)

“The practice of obtaining needed services, ideas, or content by soliciting contributions from a large group of people and especially from the online community rather than from traditional employees or suppliers “. (Merriam Webster)

OBJECTIVES OF THE STUDY

- To know the level of perception of crowd sourcing used by the employees in the medium sector industry.
- To measure the industrial performance of medium sector industry by making use of crowd sourcing technology.
- To understand the relationship between the usage level of crowdsourcing and industrial performance in the medium sector industry.

HYPOTHESIS

- There exists a high level of perception towards crowdsourcing of employees in the media sector industry.
- There exists a high level of industrial performance in the media sector industry.
- There exists a positive relationship between the usage level of crowdsourcing and industrial performance in the

medium sector industry.

METHODOLOGY

In the present study, survey method has been used in order to know the perception level of crowd sourcing by employees in various organizations and to know the industrial performance in the organization in regard to the crowd sourcing activity. The sample have been fixed as 100 respondents from various IT. Simple random sampling technique has been used in the present study. The data has been gathered from various employees in different organization. The different type of statistical techniques used are descriptive type of statistics and correlation for the analytical purpose.

ANALYSIS AND INTERPRETATION

A grading table has been done to assess the usage level of crowd sourcing activities in the medium sector industry. The mean and standard deviation value is compared with the grading table. The grading table says that mean scores from 1-50 is at low level, 51- 101 is at moderate level and 102 -150 is at high level.

Table 1: Crowd Sourcing- Descriptive Statistics

Descriptive Statistics	Crowd Sourcing
Mean	121.43
Median	120.00
Mode	120.00
Standard deviation	11.030
Skewness	0.470
Kurtosis	2.925

Table 1 shows that Mean value is 121.43 with standard deviation 11.030. It shows that high level of crowd sourcing activities happens in the organization.

Table 2: Employee Performance-Descriptive Statistics

Descriptive Statistics	Employee Performance
Mean	123.64
Median	120.50
Mode	115
Standard deviation	10.533
Skewness	0.721
Kurtosis	0.321

Table 2 reveals that Mean value is 123.64 with standard deviation 10.533. It shows that high level of industrial performance exists in the organization because of the usage of crowd sourcing.

Table 3: Correlation: Crowd Sourcing and Employee Performance

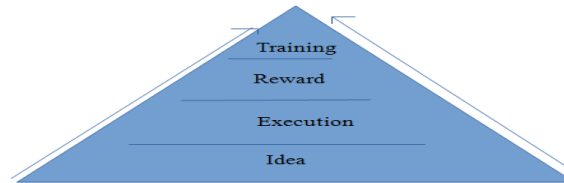
Particulars		Crowd Sourcing	Employee Performance
Crowd sourcing	Pearson Correlation	1	.398**
	Sig. (2-tailed)		.000
	N	100	100
Employee performance	Pearson Correlation	.398**	1
	Sig. (2-tailed)	.000	
	N	100	100

** . Correlation is significant at the 0.01 level (2-tailed).

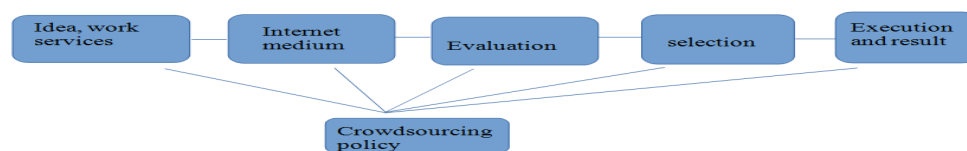
There exists a positive correlation between crowd sourcing and employees performance. Since the p- value 0.000

at 0.01 significance. This result shows that usage of crowd sourcing technology has enhanced the industrial performance of medium sector industry.

RESULTS AND DISCUSSIONS



One of the major techniques of crowd sourcing is crowd casting. This study gives a suggestion for including a clear model of crowd casting which is very much a structured one. The second level that is the Reward is the push strategy and the third level i.e Training is the pull strategy. This Model explains the four levels to understand the concept of crowd casting i.e Input is the idea generated by the individual, the idea is then executed, the output (expense in terms of corporate level) is the reward given. The last level benefits the both parties by developing the crowd unique idea through progressive and regressive training which generates satisfaction to the organization and the same acts as a motivation for the individual to generate unique ideas in them. Crowd casting is the technique of crowd sourcing.



The above illustration is the crowd sourcing model and is also known as Economical model. The 5 steps in the model are given below:

1) Idea, Work and Services: Idea is something raw opinion, which is transformed meaningfully into the productive sector. The idea generated by the crowd (individual) thinks creatively from the employees and give such information which is the solution to the current problem existing in the organization. The work can be sought out by crowd individual by using the skills and techniques to complete the task of the organization. This idea is submitted thereby to the organization. Services involves the methods to perform the work in the organization, the way in which you look into the critical components of the product like warranty, guarantee and the maintenance procedure to do in the organization.

2) Internet Medium: The idea once given by the individual is submitted through the internet website. This Internet medium is developed in such a way that various activities are arranged in the particular firm's website with the reward section to be applicable for the crowd once the idea is submitted.

3. Evaluation: The ideas once submitted have been analyzed by listing down the merits and demerits of each and every idea submitted by the crowd Labors.

4. Selection: The ideas once critically thought, the best idea have to be selected for production.

5. Execution and Result: The best idea have to be bought into the real screen of the organization environment. The execution has to be followed as per the crowd sourcing policy of the company as well as the government. If the execution is failed then training to the crowd labours should be given. If success gives out the voice, then come up with the different idea.

For every set up in the organization need some sort of system and there arises the need for rules and guidelines for managing the crowd-labours. The company has to prepare the crowd sourcing guidelines and the houses in the parliament have to pass the crowd sourcing bill to turn it into law.

SUGGESTIONS

Company's crowd sourcing policy should take into account the following points:

- Quality Control System should focus more on price, marketing and service mechanism.
- Crowd-monitoring system have to be configured to check the activities performed by the crowd at regular pace.
- Flexible consideration should given based on the skills, ideas utilised in the course of the crowd sourcing activity to the crowd individual.
- The ideas should be procured by different suppliers apart from the organization's regular supplier to supply the goods and services.
- The ideas should be motivated by the organization for the employees submitting the unique ideas to the top -level management.
- Selection of an idea should not be done based on the individuals as blood relations.
- Statistical and mathematical techniques have to be used while evaluating the idea of the crowd-labour.

Government'S Crowd Sourcing Policy Takes Into the Following Account

- Stipend has to be given to the crowd individuals for each idea worked out and submitted to the organization.
- If the idea of the crowd labours are not executed properly, compensation have to be given in proportion to the organization employee's pay-scale.
- Minimum tax rate of 3% on the consideration paid by the organization to the crowd labour have to be levied. The tax rate has to flexible in case of loss to the crowd labour.
- Non financial reward (in the form of a kind) has to be given to the crowd- labours family.
- Application have to be made mandatory for sharing the grievances of the crowd-labours.

Innovation should be the prime focus in the organization. Employment opportunity in our country would increase in our country if we adopt Crowd sourcing activity. In western economies, The LDR system is that application which makes the individual take the monopoly of the radio station. Listener Driven Radio system application has to be taken initiative by the government of India. In India, the government Crowdsourcing policy has to be included in the mainstream of the union budget.

CONCLUSIONS

Finally, crowd sourcing has to be given the main priority among the Indian economical sectors. The benefits by adopting crowd sourcing activity will be accrued in the long run. It also reduces the stress of the employees in conducting the similar tasks in the organization, by engaging in extra activities in the sense that they have the option to open up the

unique idea in the purview of product development in the organization which ultimately results in the future growth of the company and thereby increases the talent within the employees, in this way the crowd sourcing changes the level of work of the employees in the organization. This activity of crowd sourcing makes each crowd labour to instill the entrepreneurial traits and increase the self-employment opportunity in India, which results in self-dependancy in the both work as well as personal life. Last but not the least, crowd sourcing helps in the personal development of the individual as well as it increases the standard of living resulting in the lifting the GDP growth in our country.

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